

XC: R. L. Stafford

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington
CIPRON

PETERS
CIPRON

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

March 9, 1982

To: G. J. HILL

From: C. F. CIECKO C.F.C.

Review Chet

M/700 CENTERFIRE BARREL
HAMMER MARKS

OUTSIDE DIAMETER HAMMER MARK STATUS

On November 28, 1981, a study was taken to determine the material removal at centerless polish (Oper. 130) over the life of an abrasive belt (100 pieces) with our current process. This meant that the 100 grit belt was flipped after 50 pieces and run for a total of 100 pieces on a flat contact wheel. The data accumulated, using 30 barrels distributed over the life of a belt, indicated that at a point 2.8 inches from the breech end anywhere from .011 to .023 was removed from the diameter with an average of .0145.

M/D .012 .000/side

A serrated contact wheel was purchased in February and on February 19th, another study was taken with all other variables held constant, except for the serrated contact wheel. Using the new wheel material removal 2.8 from the breech ranged from .0184 to .0351 with an average of .0242, about .010 more than the current process. The thirty (30) samples were identified and looked at after color by Wendell Globig and I. None of the barrels had visible outside hammer marks.

Go to wheel

We are currently waiting for the computer analysis of the study data which will be evaluated, and probably a recommendation will be made to use the serrated wheel as per our experiment.

Chet

- How much M/D allows ?
- Cost on extra half pass.
- Review Studies.
- Material removal extra pass?

M/700 CENTERFIRE BARREL HAMMER MARKS - Contd.

Since around the first of the year, the centerless polish has been running to a deviation which involves an extra pass at the breech end and changing belts after 70 pieces total. Apparently, this has helped significantly, because both Assembly and Barrel Shop Foremen involved have delt with little or no hammer mark problems since then.

Cost/year



INSIDE DIAMETER HAMMER MARK STATUS

Occasionally, the centerfire GFM's feed rate must be reduced from 10 IPM to 8 IPM to eliminate I.D. hammer marks. Many variables may effect this condition.

On March 5th, I reviewed a barrel which exhibited this condition with Jerry Burns, and it was decided that we build a gun with it and test it extensively for accuracy.

When the above tests are completed and results analyzed, I will be in a better position to know if the process needs changing.

CFC/cac